

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

**LISTING OF CLAIMS:**

Please cancel claims 1-18 without prejudice or disclaimer and substitute new claims 19-49 therefor as follows:

1 - 18 (cancelled)

19. (New) A pointing device comprising:

a ring-like magnet that is movably supported in parallel to a plane; and

a plurality of magnetic sensors for detecting magnetic flux density produced by said ring-like magnet in a direction parallel to the plane, wherein

said magnetic sensors detect variations in the magnetic flux density in the direction parallel to the plane, the variations being caused by movement of said ring-like magnet.

20. (New) The pointing device as claimed in claim 19, wherein said ring-like magnet is internally and externally unipolarly magnetized.

21. (New) The pointing device as claimed in claim 20, further comprising a printed circuit board on which a resin layer is provided, wherein said ring-like magnet is fixed to said resin layer, and said magnetic sensors are placed on said printed circuit board.

22. (New) The pointing device as claimed in claim 20, wherein said magnetic sensors are disposed symmetrically on X and Y axes, which are two axes on a two

dimensional plane of an orthogonal system, and said ring-like magnet is placed near the center of said magnetic sensors.

23. (New) The pointing device as claimed in claim 20, wherein said magnetic sensors are magnetic sensors utilizing Hall effect, and the output signals are proportional to the magnetic flux density.

24. (New) The pointing device as claimed in claim 20, wherein said magnetic sensors are magnetic sensors utilizing magneto-resistive effect.

25. (New) The pointing device as claimed in claim 20, further comprising an origin returning means for returning said ring-like magnet to the origin using magnetic force generated by said ring-like magnet.

26. (New) The pointing device as claimed in claim 19, wherein said ring-like magnet has at least one of its internal wall and external wall magnetized in a multipolar manner, and said magnetic sensors are faced to a magnetic pole center of said ring-like magnet magnetized in a multipolar manner.

27. (New) The pointing device as claimed in claim 26, further comprising a printed circuit board on which a resin layer is provided, wherein said ring-like magnet is fixed to said resin layer, and said magnetic sensors are placed on said printed circuit board.

28. (New) The pointing device as claimed in claim 26, wherein said magnetic sensors are disposed symmetrically on X and Y axes, which are two axes on a two dimensional plane of an orthogonal system, and said ring-like magnet is placed near the center of said magnetic sensors.

29. (New) The pointing device as claimed in claim 26, wherein said magnetic sensors are magnetic sensors utilizing Hall effect, and the output signals are proportional to the magnetic flux density.

30. (New) The pointing device as claimed in claim 26, wherein said magnetic sensors are magnetic sensors utilizing magneto-resistive effect.

31. (New) The pointing device as claimed in claim 26, further comprising an origin returning means for returning said ring-like magnet to the origin using magnetic force generated by said ring-like magnet.

32. (New) The pointing device as claimed in claim 19, further comprising a printed circuit board on which a resin layer is provided, wherein said ring-like magnet is fixed to said resin layer, and said magnetic sensors are placed on said printed circuit board.

33. (New) The pointing device as claimed in claim 32, wherein said resin layer and said printed circuit board have their opposing faces not bonded to each other.

34. (New) The pointing device as claimed in claim 32, wherein said resin layer is an elastic sheet.

35. (New) The pointing device as claimed in claim 32, wherein said resin layer is a silicone resin.

36. (New) The pointing device as claimed in claim 32, wherein said magnetic sensors are disposed symmetrically on X and Y axes, which are two axes on a two dimensional plane of an orthogonal system, and said ring-like magnet is placed near the center of said magnetic sensors.

37. (New) The pointing device as claimed in claim 32, further comprising a switch on the resin layer side of said printed circuit board and at about the center of said ring-like magnet.

38. (New) The pointing device as claimed in claim 37, further comprising a projection for depressing said switch at a portion facing said switch on said resin layer.

39. (New) The pointing device as claimed in claim 19, wherein said magnetic sensors are disposed symmetrically on X and Y axes, which are two axes on a two dimensional plane of an orthogonal system, and said ring-like magnet is placed near the center of said magnetic sensors.

40. (New) The pointing device as claimed in claim 39, further comprising a switch on the resin layer side of said printed circuit board and at about the center of said ring-like magnet.

41. (New) The pointing device as claimed in claim 40, further comprising a projection for depressing said switch at a portion facing said switch on said resin layer.

42. (New) The pointing device as claimed in claim 19, wherein said magnetic sensors are magnetic sensors utilizing Hall effect, and the output signals are proportional to the magnetic flux density.

43. (New) The pointing device as claimed in claim 42, wherein said magnetic sensors utilizing the Hall effect are disposed on the resin layer side of said printed circuit board to detect the magnetic flux density in a direction parallel to the surface of said printed circuit board.

44. (New) The pointing device as claimed in claim 42, wherein said magnetic sensors utilizing the Hall effect are magnetic sensors with a single output terminal.

45. (New) The pointing device as claimed in claim 19, wherein said magnetic sensors are magnetic sensors utilizing magneto-resistive effect.

46. (New) The pointing device as claimed in claim 45, wherein said magnetic sensors utilizing the magneto-resistive effect are semiconductor magneto-resistive elements which are disposed on the resin layer side of said printed circuit board to detect the magnetic flux density in a direction parallel to the surface of said printed circuit board.

47. (New) The pointing device as claimed in claim 45, wherein said magnetic sensors utilizing the magneto-resistive effect are four semiconductor magneto-resistive elements disposed symmetrically on X and Y axes, which are two axes on a two dimensional plane of an orthogonal system, wherein two magnetic sensors on the X axis are electrically connected at a first connection point; and two magnetic sensors on the Y axis are electrically connected at a second connection point, and wherein said pointing device detects variations in ambient magnetic flux density caused by movement of said ring-like magnet using electric signals at the first and second connection points.

48. (New) The pointing device as claimed in claims 19, further comprising an origin returning means for returning said ring-like magnet to the origin using magnetic force generated by said ring-like magnet.

49. (New) An electronic device incorporating the pointing device as defined in any one of claims 19-48.